

IN THE CLAIMS

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims in accordance with the following:

1. (CURRENTLY AMENDED) A computer system ~~for~~ conducting purchase transactions using wireless communication between a consumer and a merchant, comprising:

- a consumer operated mobile device;
- a merchant operated device;
- a trusted secure transaction server (STS) device;
- one or more payment service devices;

an open and non-secure wireless communication ~~network~~channel in communication with the consumer device and the merchant device;

a communication network in communication with the merchant device and the STS device;

a communication network in communication with the STS device and the payment service devices,

wherein the consumer device, merchant device and ~~secure transaction server~~STS device ~~each comprise a controller~~ are capable of executing as a Secure Transaction Protocol over the open and non-secure wireless communication channel, a symmetric agreement verification protocol as a Secure Transaction Protocol verifying a purchase transaction between the merchant and the consumer based upon both a first input parameter and a second stored parameter of the consumer mobile device identifying the consumer to the STS device.

2. (CURRENTLY AMENDED) The computer system as in claim 1, wherein the wireless ~~network~~communication channel is a local wireless network and ~~the consumer mobile device is in proximity to the merchant device~~comprises a local wireless network interface connecting to the local wireless network.

3. (CURRENTLY AMENDED) The computer system as in claim 2, wherein the consumer ~~mobile device allows the consumer to input~~accepts a private identification information ~~into consumer device~~entry of the consumer as the first input parameter.

4. (CURRENTLY AMENDED) The computer system as in claim 3 wherein the consumer device is mobile device, coupled to a wireless network and comprising:

~~a wireless network interface connecting to the wireless network, a processor~~
executing consumer mobile device executes a web browser application providing a user interface to the purchase transaction, a purchasing application executing the Secure Transaction Protocol and a submit receipt application generating a receipt of the purchase transaction.

5. (CURRENTLY AMENDED) The computer system as in claim 2,
~~where in the merchant device is coupled to a wireless network for communication with a consumer and a wired or wireless network for communication to the STS and comprising; wherein the communication network in communication with the merchant device and the STS device is a wire and/or a wireless network, and the merchant device further comprises a wireless network interface connecting to the wireless network for the consumer, a wired or wire~~
and/or wireless network interface connecting to the wire and/or wireless network in communication with the STS device for the STS, and

wherein the merchant device executes a processor executing a merchant retail application program providing a user interface to the purchase transaction and a purchasing application program executing the Secure Transaction Protocol (STP).

6. (CURRENTLY AMENDED) The computer system as in claim 4, wherein the mobile consumer ~~mobile device is packaged as a portable device, comprising:~~

comprises a lightweight processor with storage capable of executing the purchase application, Secure Transaction Protocol (STP) and a the web browser, and the submit receipt application, application and the consumer mobile device further comprises:

~~a wireless network interface and connection to a wireless network, and capable of connecting to a merchant device;~~

~~a battery;~~

a display ~~for communicating output to a user and for other interaction with its user;~~ and means for a user to input information, information including navigation buttons or a touch screen of the display.

7. (CURRENTLY AMENDED) The computer system as in claim 6, wherein the consumer mobile consumer device is packaged as a credit card-sized device credit card sized of (approximately 55mm x 85 mm) and approximately 10mm thick or thinner.

8. (CURRENTLY AMENDED) The computer system as in claim 7, wherein ~~wherein the~~ wireless network interface of the consumer mobile consumer device can be any of, WiFi, Bluetooth, UWB, IR, Zigbee, or other local wireless network interface, or a cellular telephone network.

9. (CURRENTLY AMENDED) The computer system as in claim 8, wherein ~~the wireless network that the mobile consumer device is capable of connecting to, includes a cellular telephone network and the consumer mobile device includes proximity binding such as associates, as a proximity binding, with the purchase transaction, based upon one or more of~~ a barcode display, a barcode, an RF-ID tag or location determination.

10. (CURRENTLY AMENDED) The computer system as in claim 9, wherein the ~~consumer device is capable of binding to purchase transaction is for purchase of a physical goods purchase good or a token presentation using a device such as a barcode display, a barcode an RF-ID tag or location determination.~~

11. (CURRENTLY AMENDED) The computer system as in claim 10, wherein the mobile consumer mobile device includes means for indicating readiness to authorize payment such as including one or more of a "Pay" button or a touch screen "Pay" button.

12. (CURRENTLY AMENDED) The computer system as in claim 64, wherein the mobile consumer mobile device comprising no display, and comprising is without a display and comprises means for communicating output including synthesized speech.

13. (CURRENTLY AMENDED) The computer system as in claim 64, wherein the ~~mobile consumer mobile device comprising nois without~~ buttons or a touch screen and comprises input means including a microphone and capable of processing input by speech recognition and output means for communicating output including synthesized speech.

14. (CURRENTLY AMENDED) The computer system as in claim 6, wherein the ~~mobile consumer mobile device further comprising a biometric sensor for user identification such as~~ identifying a user according to one or more of fingerprint or face recognition.

15. (CURRENTLY AMENDED) The computer system as in claim 6, wherein the ~~mobile consumer mobile device~~ interfaces to a display located remotely from the consumer mobile device, on the merchant device.

16. (CURRENTLY AMENDED) The computer system as in claim 6, wherein the ~~mobile consumer mobile device~~ is a Personal Digital Assistant (PDA) or a mobile phone.

17. (CURRENTLY AMENDED) The computer system as in claim 5, wherein ~~wherein the local wireless network interface of the mobile-consumer mobile device comprising a local wireless interface including is~~ WiFi and the computer system further comprises a WiFian access point operated by the merchant device and the merchant device ~~providing~~provides a directory service on the local wireless network.

18. (CURRENTLY AMENDED) The computer system as in claim 5, wherein the ~~wireless network interface of the mobile consumer device comprising a local wireless interface of the consumer mobile device including includes~~ IR and the computer system further comprises an IR access point operated by the merchant device.

19. (CURRENTLY AMENDED) The computer system as in claim 5, wherein the ~~wireless network interface of the mobile consumer device comprising a local wireless interface including of the consumer mobile device includes~~ UWB and the computer system further comprises a UWBan access point operated by the merchant device.

20. (CURRENTLY AMENDED) The computer system as in claim 5, wherein the ~~wireless network interface of the mobile consumer device comprising~~ a local wireless interface ~~including of the consumer mobile device includes~~ Zigbee and the computer system further comprises a Zigbee an access point operated by the merchant device.

21. (CURRENTLY AMENDED) The computer system as in claim 5, wherein the ~~wireless network interface of the mobile consumer device comprising~~ a local wireless interface ~~of the consumer mobile device includes~~ including WiFi and the computer system further comprises one or more WiFi access points operated by another party as a hotspot application.

22. (CURRENTLY AMENDED) The computer system as in claim 5, wherein the ~~wireless network interface of the mobile consumer device comprising~~ a local wireless interface ~~including of the consumer mobile device includes~~ Bluetooth and the compute system further comprises one or more access points operated by another party as a hotspot application.

23. (CURRENTLY AMENDED) The computer system as in claim 5, wherein the ~~wireless network interface of the mobile consumer device comprising~~ a local wireless interface ~~including of the consumer mobile device includes~~ IR and the compute system further comprises one or more access points operated by another party as a hotspot application.

24. (CURRENTLY AMENDED) The computer system as in claim 5, wherein the ~~wireless network interface comprising~~ a local wireless interface ~~including of the consumer mobile device~~ UWB and the computer system further comprises one or more access points operated by another party as a hotspot application.

25. (CURRENTLY AMENDED) The computer system as in claim 5, wherein the ~~wireless network interface of the mobile consumer device comprising~~ a local wireless interface ~~including of the consumer mobile device includes~~ Zigbee and one or more access points operated by another party as a hotspot application.

26. (CURRENTLY AMENDED) The computer system as in claim 5, wherein the ~~wireless network interface of the mobile consumer device comprising~~ a local wireless interface ~~of the consumer mobile device is as~~ a point-to-point connection based on IR.

27. (CURRENTLY AMENDED) The computer system as in claim 51, wherein the wireless communication channel between the consumer mobile device and the merchant device is a wireless network interface of the mobile consumer device comprising cellular phone interface, telephone network and the consumer mobile device associates with the purchase transaction, as proximity binding of the consumer.

28. (CURRENTLY AMENDED) The computer system of any one of claims 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, and 27, wherein the merchant device ~~interfacing to a consumer device through the wireless network and executing~~executes a physical goods purchase as the purchase transaction and associates, as a binding, the physical goods purchase with the binding a consumer mobile device to the physical goods purchase.

29. (CURRENTLY AMENDED) The computer system as in claim 28, ~~further comprising partitioning wherein the controller of the merchant device partitions software execution by~~executing in which the merchant retail application program and the universal pervasive transaction framework application program are executedpurchasing application programexecuting the Secure Transaction Protocol in separate processing partitions of the merchant device.

30. (CURRENTLY AMENDED) The computer system as in claim 29, ~~further comprising wherein the wire and/or wireless network between the STS device and the merchant device is a secure network connection~~channel to a secure transaction server.

31. (CURRENTLY AMENDED) The computer system as in claim 30, wherein the secure network connection to the ~~secure transaction server~~STS device is over the Internet.

32. (CURRENTLY AMENDED) The computer system as in claim 31, wherein the secure network connection channel to the ~~secure transaction server~~STS device is wireless.

33. (CURRENTLY AMENDED) The computer system as in any one of claims 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, and 27, further comprises wherein the local wireless network comprises multiple local wireless network access points operated by the merchant and granting access to the consumer mobile device.

34. (CURRENTLY AMENDED) The computer system as in any one of claims 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, and 27, further comprises wherein the local wireless network comprises multiple local wireless network access points operated by another party but granting access to the merchant device and the consumer mobile devicemerchants and consumers.

35. (CURRENTLY AMENDED) The computer system of claim 1, wherein in which the secure transaction server is operated the STS device includes in a secure physical environment protecting so that the integrity of the consumer and merchant accounts is protected.

36. (CURRENTLY AMENDED) The computer system of claim 35 further comprising a multiple server system to handle plurality of STS devices handling varying processing load and access demands according to geographic constraints and temporal differences in demand, and preserving the behavior and security properties of the Secure Transaction Protocol.